LONG-ACTING AND PERMANENT METHODS

In this issue we examine the unrealized potential of long-term contraception to help family planning programs meet the needs of clients and improve public health.

Long-acting and permanent methods (LAPMs) of contraception include reversible contraceptive implants and intrauterine devices (also known as intrauterine contraceptive devices, or IUCDs), as well as the permanent methods of vasectomy and female sterilization.

LAPMs are the most effective modern methods for preventing unintended pregnancies. Because they are also cost-effective (see page 2), increases in their use can help sustain family planning programs. But the use of LAPMs is limited in most countries in sub-Saharan Africa.

Challenges to LAPM use persist. However, experience from Kenya and other countries suggests that comprehensive efforts to improve service delivery and to educate potential clients can increase use (see page 4). And research conducted by FHI has identified ways to improve access to LAPM services (see pages 5 and 7).

We hope that this issue of our newsletter will help you continue to support the revitalization of LAPMs. We would also like to hear from you. Please send your comments on this issue to familyhealthresearch@fhi.org.

B. Ndugga Maggwa
Director of Research
Africa Regional Office, FHI
Providing LAPMs expands contraceptive choice for clients.

LAPMs can help countries reach national health goals.

Persistent challenges to LAPM use need to be overcome.

**Long-Acting and Permanent Methods**

LAPMs contribute to family planning programs.

Long-acting and permanent methods (LAPMs) of contraception remain a relatively small — and sometimes missing — component of national family planning programs in sub-Saharan Africa. These methods can enhance family planning programs in meaningful ways if challenges to their availability, access, and acceptability can be overcome.

**Responding to individual needs**

The intrauterine device (IUD), implants, vasectomy, and female sterilization are appropriate choices for many people who want safe and effective protection against an unintended pregnancy. The long-term effectiveness and reversibility of the IUD and implants make these methods suitable for women and couples who want to space their pregnancies, for young people who want to delay marriage and parenthood, and for women who discontinue other methods of family planning but still want to avoid pregnancy. Vasectomy and female sterilization are best suited for individuals and couples who are certain they do not want more children, although reversible LAPMs are also options for women who want to stop childbearing.

Providing a range of methods, including LAPMs, gives family planning clients more contraceptive choices. A woman who has more choices is more likely to start using a method, be satisfied with her choice, and continue using the method until she no longer wishes to prevent pregnancy.

Continuation rates appear to be substantially higher among women who use reversible LAPMs than they are among women who use short-acting methods such as oral contraceptives and injectables. This may be because of the high rates of contraceptive effectiveness and ease of use associated with LAPMs. In Africa, research suggests that about 80 percent of the women who choose the IUD — and even more women who choose implants — continue using the method for at least one year.¹ In contrast, data from surveys in some developing countries suggest that only 60 percent to 70 percent of women who choose oral contraceptives or injectables are still using them after one year.

**Sustaining programs**

Over time, LAPMs are also cost-effective for programs. When compared with the use of other methods, the use of LAPMs results in fewer unintended pregnancies and fewer clinic visits. This eases the burden on overstretched health systems and providers. If used for at least three years, the IUD and implants, along with vasectomy, are considered the three most cost-effective methods when all direct medical costs associated with the methods, their side effects, and unintended pregnancies are taken into account.

**Reaching national health goals**

LAPMs can contribute to healthy timing and spacing of pregnancies, which improve the outcomes of pregnancy and childbirth for...
mothers and their children. The risk that a woman will die as a result of pregnancy, childbirth, or unsafe abortion is about one in 16 in sub-Saharan Africa.\(^2\) Harmful outcomes like these can be avoided if a woman waits at least two years after the birth of a child to become pregnant again.

The use of LAPMs is also part of an important but often overlooked strategy for preventing mother-to-child transmission of HIV. Meeting an unmet need for family planning among HIV-infected women who do not wish to become pregnant is at least as cost-effective as the traditional strategy of providing HIV counseling, testing, and treatment with antiretroviral drugs such as nevirapine.\(^1\)

The use of family planning to avoid unintended pregnancy is already preventing the birth of an estimated 173,000 HIV-infected infants each year in sub-Saharan Africa.

**Overcoming challenges**

Providing women and couples access to a range of contraceptive choices, including LAPMs, protects their human rights and benefits public health. Yet several strong barriers to LAPM use persist in sub-Saharan Africa.

Policy-makers and program managers are sometimes reluctant to make LAPMs part of the mix of contraceptive methods because of perceived cost barriers. As a result, commodities, equipment and supplies, and opportunities to train providers are not always available. Even when programs provide LAPMs, stockouts of the necessary commodities or equipment can be problematic.

Limited access to LAPMs is a problem. Short-acting methods are becoming increasingly available through commercial outlets and community-based distribution, especially in rural areas, where most people live. However, the provision of LAPMs is often confined to urban facilities. Distance to clinics and fees for services can make it difficult to obtain services.

Even when trained providers are available, medical barriers inhibit access. Providers may not provide LAPMs to their clients because of unnecessary restrictions, such as age or the number of children a woman already has. They may not be familiar with the latest evidence, and so may unintentionally deny a client an LAPM for inappropriate medical reasons. Or, they may not offer comprehensive information about all methods, thus limiting the ability of clients to make informed contraceptive choices.

Many potential clients lack information about LAPMs or have misconceptions about the methods. Even in countries where most people know about family planning, fewer people know of the IUD and vasectomy than know of other methods. Myths and misconceptions are also widespread for these methods.

Experience suggests that some of these obstacles to LAPM use can be overcome. To do so, policy-makers and program managers must promote an enabling environment through evidence-based policies and guidelines, improved provision of services, and the education of health providers, communities, and individuals.

**LAPMs AND HIV**

LAPMs are suitable options for most women and couples who want to prevent unintended pregnancies. Women living with HIV may rely on an IUD, implant, or female sterilization for contraception, with only two exceptions. If a woman has an AIDS-related illness, she should postpone surgical sterilization until after her condition improves. And IUD insertion is not usually recommended as a first choice for a woman who has developed AIDS if she is not on antiretroviral therapy or is not responding to treatment. This is because her suppressed immune system could increase the risk of infection during insertion. However, HIV-infected IUD users who develop AIDS generally may continue using the device. Vasectomy can be used by any man, regardless of his HIV status.

---

**References**

1. Rivera R, Chen-Mok M, McMullen S. Analysis of client characteristics that may affect early discontinuation of the TCu-389A IUD. Contraception 1999;60(3):155–60.
LAPM Interventions in Kenya

Assessment provides guidance for the future.

Interventions to expand contraceptive choice by improving access to long-acting and permanent methods (LAPMs) can be effective, but long-term strategies are needed to sustain the results of these efforts.

This was one of the lessons drawn from a recent assessment of interventions to increase the use of LAPMs in Kenya. The findings of the assessment will help guide the design of future efforts to revitalize LAPM use.

Rationale

Since the 1980s, the proportion of Kenyan women using LAPMs has declined, while the proportion using oral contraceptives and injectables has increased. The result is a trend in use that is skewed toward short-acting methods. For example, according to the Kenya Demographic and Health Survey from 2003, fewer than 3 percent of married contraceptive users were using the intrauterine device (IUD). More than 14 percent were using injectables.

The current mix of contraceptive methods in Kenya is not considered cost-effective or sustainable. As a greater number of donors expect governments to provide their own contraceptive commodities, countries such as Kenya need to ensure a more balanced method mix that includes LAPMs.

Under the Ministry of Health’s leadership, several interventions have been launched in Kenya since 2000 to increase the use of LAPMs. The Ministry of Health decided to assess three of them: the AMKENI Project, the ACQUIRE Project, and the AMUA network.

These three interventions were chosen because they all used a comprehensive approach that included advocacy, creation of demand for LAPMs, and improvement in the delivery of LAPM services. The multi-organizational AMKENI Project sought to improve the overall provision of reproductive health services, including LAPMs. The ACQUIRE Project, managed by EngenderHealth, worked to increase uptake of IUDs in the Kisii District. The AMUA network of “social franchises,” managed by Marie Stopes Kenya, worked to improve access to clinical methods of family planning among rural couples. (A social franchise is a partnership among private-sector organizations that tries to help a public-sector organization reach a social goal they all share.)

Results

All three interventions resulted in large increases in the use of LAPMs. For instance, the number of female sterilizations performed at 96 AMKENI-supported facilities increased from 750 in 2001 to 3,318 in 2005. The number of IUDs inserted at the same facilities increased from 510 in 2001 to 1,169 in 2005. The provision of contraceptive implants also increased, but implant use varied from year to year depending on availability.

MORE EXPERIENCES

Ghana

From 1994 to 2004, EngenderHealth trained more than 300 medical teams to perform female sterilizations. The number of facilities providing female sterilizations nearly tripled, and more than 27,000 women chose the procedure.

Mali

Mali was among the first African countries to obtain regulatory approval for Norplant. The number of women using implants increased from fewer than 3,000 in 1987 to more than 10,000 in 2001.

Nepal

Through Population Services International/Nepal’s Sun Quality Health Network of more than 200 private health clinics, providers inserted nearly 2,000 IUDs and performed 6,000 vasectomies and female sterilizations at both stationary and mobile clinics from 2003 to 2006.

Tanzania

Through the CHOICE Initiative, Marie Stopes International operates mobile teams of providers who offer free LAPM services at Ministry of Health posts in rural areas. In 2006, more than 30,000 implants and 47,000 female sterilizations were provided.
Despite large increases in LAPM use, direct comparisons of the interventions were difficult because they were conducted at different sites and targeted different methods. To facilitate comparisons, a small number of sites that were providing IUDs were selected to represent each of the three interventions. During the AMKENI intervention, the number of IUDs that were provided at the eight sites included in the assessment rose from one per month to a peak of six per month; a year later, that number had fallen to four per month. The AMUA project is still under way, but results from the ACQUIRE intervention were similar, with IUD use dropping after the initial intervention.

At its midterm evaluation, the AMUA network found that its costs were much higher than planned. The AMKENI and ACQUIRE interventions did not track their costs. However, given the large number of activities they involved and the modest increases in IUD provision observed, these interventions were also likely expensive relative to their achievements.

Lessons learned

A task force is using the lessons learned from these interventions to develop a comprehensive strategy for revitalizing LAPM use in Kenya. Some of the lessons identified by the assessment include the following:

- Sustaining a trained work force is important for reducing provider bias against LAPMs. Continued training is needed because providers are often transferred to different facilities after an intervention.
- Assuring consistent supplies of commodities and equipment is crucial. Supplies quickly decline after an intervention ends, and stockouts can force clients to choose methods they do not prefer.
- Community-based volunteers can effectively promote and refer clients for LAPM services. If funds are available, it may be cost-effective to maintain a core group of highly motivated community-based volunteers by providing them with regular incentives rather than constantly training new volunteers.
- Method-specific marketing efforts that use the mass media seem to reach potential clients more effectively than broader information campaigns about LAPMs.

Resources

Long-Acting and Permanent Methods: Addressing an Unmet Need for Family Planning in Africa. This set of eight advocacy briefs examines the benefits of LAPMs and the rationale for introducing or revitalizing their use within national family planning programs. It also offers ideas about how to improve and expand LAPM provision. Four of the briefs are from the Global Health Technical Brief series produced by the INFO Project at the Johns Hopkins Bloomberg School of Public Health. Each brief provides the most current information about a specific LAPM. Available at: http://www.fhi.org/en/RH/Pubs/servdelivery/LAPM/index.htm.

The IUD Toolkit. The IUD Toolkit is a comprehensive source of up-to-date, evidence-based information about the IUD. This online resource for program managers, policy-makers, family planning providers, and potential clients was developed by the Maximizing Access and Quality Initiative of the U.S. Agency for International Development. It offers guidance on best practices, training materials, case studies, and tools to help increase access to high-quality IUD services. Available in English, French, and Spanish at: http://www.maqweb.org/iudtoolkit/.

Implants Toolkit. The types of resources provided by this online toolkit about contraceptive implants are similar to those found in the IUD Toolkit. Information is organized by topic and by the intended audiences: program managers, providers, policy-makers, logistics managers, communications professionals, trainers, researchers, and implant users. Available at: http://www.implantstoolkit.org.

LAPM Provision in Eight Former AMKENI Sites in Western Province, Kenya


IUD promotion and the availability of other methods both influence IUD use, as shown in this graph. IUD use dipped in 2005 when implants returned to the shelves after being out of stock for almost a year and dropped again after the AMKENI Project ended.
FIELD RESEARCH REPORT

THE FUTURE OF CONTRACEPTIVE IMPLANTS IN AFRICA

Greater availability could mean better public health.

An assessment of Kenya’s experience with contraceptive implants — coupled with the availability of simpler, cheaper implants — suggests a brighter future in sub-Saharan Africa for this long-acting method of family planning.1

FHI conducted the assessment to better understand the demand for implants and the capacity of providers to offer the method in Kenya. Much of this information was gathered through interviews with 35 policy-makers, donors, and family planning professionals. A modeling exercise was also performed to determine the possible impact that more implant use could have on the nation’s public health.

A major finding was that the demand for implants has remained high since implants were first introduced in Kenya more than 20 years ago. Interviewers found that many providers have to keep lists of clients who are waiting for future shipments of implants.

According to data from the Demographic and Health Surveys, knowledge of the method has also increased. Even though the rate of implant use has never exceeded 1 percent in Kenya, more than half of Kenyan women say they know about the method. More than 1,000 health facilities are providing implants, and the current network of family planning providers appears ready to increase the volume of services offered.

Unfortunately, the facilities that offer implants in Kenya are often short of stock because donors have historically invested more heavily in short-acting methods, such as oral contraceptives, which are less expensive to purchase. However, studies have shown that implants are often more cost-effective than oral contraceptives over time.

The availability of implants is likely to improve. Their costs have been decreasing, and simpler implants are entering the market. Compared with Norplant (which is being phased out), these newer implants are easier for a trained provider to insert and remove. They also have fewer surgical complications.

The modeling exercise

The modeling exercise used published material on the relationships between different methods of family planning and the rates of discontinuation and unintended pregnancies associated with their use.

Information on the current population of reproductive-age women in Kenya was used to determine baseline levels of use for the different methods.

The scientists then estimated the number of unintended pregnancies that could be prevented if some oral contraceptive users chose implants instead.

Potential benefits

If just 100,000 oral contraceptive users in Kenya chose implants, roughly 26,000 unintended pregnancies could be prevented over the next five years.

This decrease in unintended pregnancies would prevent about 260 maternal deaths.

Reference

Vasectomy in Tanzania

Study examines acceptability among men and women.

Research by FHI, the ACQUIRE Project (managed by EngenderHealth), and the nongovernmental organization Healthscope in Tanzania’s Kigoma Region identified a number of reasons why men and their partners might choose vasectomy. The findings also highlight barriers to the acceptance of vasectomy and suggest ways to increase the adoption of the method, both within and outside the region.

Rates of vasectomy use are slightly higher in Kigoma Region than they are in other parts of Tanzania. But in general, less than 1 percent of the couples who use contraception in Tanzania or other sub-Saharan countries rely on vasectomy.

For this study, 10 vasectomy clients were interviewed during July and August 2004 about their decisions to have a vasectomy. An additional 28 clients and 22 of their wives, 29 potential clients, and 33 women who had undergone tubal sterilization were also involved in group discussions about contraceptive decision-making.

Read or download the full study, published in International Family Planning Perspectives, at: http://www.guttmacher.org/pubs/journals/3301307.html.

What men say:
“I had been expecting to be more educated about it, because I have no idea what is being done during the procedure. How do they start? I don’t know. I need to get a whole picture about vasectomy before I decide to do it.”
— Potential vasectomy client, Kigoma Region

RESULTS

- Economic hardship due to the expense of raising children was the most common reason participants gave for finding vasectomy acceptable.
- Wives played an important role in the decision to undergo a vasectomy. While most wives accepted the procedure, four potential vasectomy clients said their wives did not want them to be sterilized.
- Several men decided not to have a vasectomy for religious reasons, but an equal number of participants had been sterilized despite the disapproval of their churches.
- More than one-quarter of vasectomy clients said that they had to postpone the procedure because a provider was not available to perform it. Several mentioned that vasectomy clients often have no one to turn to if they experience problems after the procedure.
- Some men and women feared that they might want more children later or that their spouses would be unfaithful after the procedure.
- A general lack of knowledge was the most common reason why potential clients had not undergone the procedure. Both men and women cited specific rumors and misconceptions about vasectomy.

IMPLICATIONS FOR SERVICE DELIVERY

To improve access and service delivery:
- Establish vasectomy outreach services and referral systems.
- Improve counseling by providers.
- Ensure that clients understand the need to use alternative contraception for 12 weeks following the procedure.

To increase demand for vasectomy:
- Orient family planning services toward men.
- Design communication strategies to improve public knowledge about vasectomy.
- Target spouses as well as potential clients with promotional messages.

Vasectomy acceptability was linked to economic hardship in the study, particularly among men.
Resources

Contraceptive Technology Update Series — Intrauterine Devices
This module in FHI’s Contraceptive Technology Update series is designed to meet the continuing educational needs of family planning providers, program managers, and policy-makers in resource-constrained settings by providing up-to-date, evidence-based information about intrauterine devices (IUDs). To use this module for a self-study program or to train physicians, nurses, pharmacists, and other health care professionals, visit: http://www.fhi.org/training/en/modules/IUD/intro.htm.

E-Forums on LAPMs
Several online forums will offer opportunities to discuss the latest evidence on long-acting and permanent methods (LAPMs).

The INFO Project is working with the ACQUIRE Project/EngenderHealth, FHI, the Population Council, and the Implementing Best Practices Initiative to organize a series of electronic forums about specific methods in 2008. The series will include forums on contraceptive implants and IUDs (February 19–22) and male and female sterilization (date to be announced). Registration forms will be available in the weeks preceding each forum at: http://www.infoforhealth.org.

Management Sciences for Health (MSH), the ACQUIRE Project/EngenderHealth, and FHI will hold an online forum about all the LAPMs April 21–25, 2008. Registration information will be available on the Global Exchange Network Web site at: http://globalexchange.msh.org.

Implants: The Next Generation
The October 2007 issue of Population Reports examines how family planning programs and providers can prepare to provide the new contraceptive implants. It was published with a supplement, Implants: Tools for Providers, which offers guidance on counseling clients about implants, identifying women who may not be able to use implants for medical reasons, and preventing infection during insertion and removal.

Printed copies of these publications are available free of charge to readers in developing countries. To order copies or an electronic subscription to Population Reports, go to: http://www.infoforhealth.org/ccpOrderForm/index.php or contact: The INFO Project, 11 Market Place, Suite 310, Baltimore, MD 21202 USA. Population Reports is also available online at: http://www.infoforhealth.org/pr/.